

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



13 OCT 2004



(43) International Publication Date
23 October 2003 (23.10.2003)

PCT

(10) International Publication Number
WO 03/086973 A1

(51) International Patent Classification⁷: C01F 5/24, C01B 31/24, A61K 33/10 Russell, John [AU/AU]; 4 Charlotte Street, Red Hill, ACT 2603 (AU).

(21) International Application Number: PCT/AU03/00417 (74) Agent: SPRUSON & FERGUSON; GPO Box 3898, Sydney, NSW 2001 (AU).

(22) International Filing Date: 7 April 2003 (07.04.2003)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

Published:

— with international search report

(30) Priority Data:
PS 1568 5 April 2002 (05.04.2002) AU

2002950860 19 August 2002 (19.08.2002) AU

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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A1 (54) Title: PROCESS AND APPARATUS FOR USE IN PREPARING AN AQUEOUS MAGNESIUM BICARBONATE SOLUTION

WO 03/086973 (57) **Abstract:** A method and an apparatus for preparing a substantially clear aqueous solution containing magnesium bicarbonate are disclosed. One method of preparing a substantially clear aqueous solution containing magnesium bicarbonate, includes contacting, with species resulting from the dissolution of carbon dioxide in water, an aqueous suspension of magnesium carbonate, at suitable conditions of pressure and temperature, so as to obtain an aqueous solution of magnesium bicarbonate and controlling the pH of the said solution so that, after reaction of the said species with the magnesium carbonate, the final pH falls within a range of from about 8.0 to about 8.8. One apparatus suitable for preparing an aqueous solution of magnesium bicarbonate, comprises means for contacting, with species resulting from the dissolution of carbon dioxide in water, a suspension of powdered magnesium carbonate in water so as to form an aqueous solution of magnesium bicarbonate and means for controlling the pH of the solution between about 7 and about 9 by adjusting the amount of at least one of the said species and said powdered magnesium carbonate that is contacted with the other.